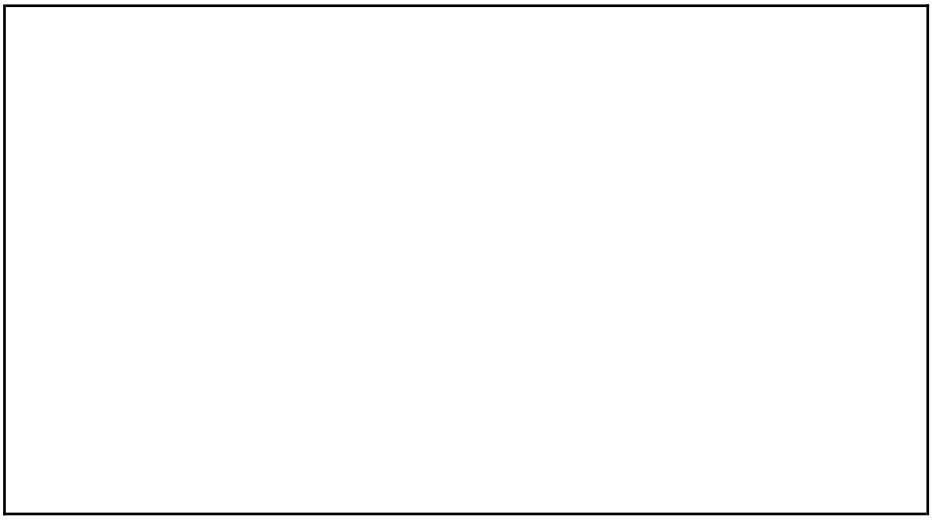
48HX030, 036, 048 & 060

HIGH-EFFICIENCY COMBINATION HEAT PUMP UNITS WITH BACKUP GAS HEATING

— PERFORMANCE DATA

— CERTIFIED DIMENSION PRINT

— CERTIFIED ROOF CURB DIMENSION PRINT



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Form 48HX-1SB New Printed in U.S.A. 5-97 Catalog No. 514-846

Date:	Supersedes:	**48HX030, 036, 048 & 060 HIGH-EFFICIENCY COMBINATION HEAT PUMP UNITS WITH BACKUP GAS HEATING**	48HX	Rev.:
JOB DATA:		LOCATION:		
BUYER:		BUYER P.O. #	CARRIER #	
UNIT NUMBER:		MODEL NUMBER:		
PERFORMANCE DATA CERTIFIED BY:			DATE:	

ARI 210 ARI 270

DESCRIPTION

48HX units are high-efficiency, one-piece heat pump units with backup gas heating, pre-wired and pre-charged at the factory.

48HX units are convertible discharge units that can be used for either horizontal or down discharge installations.

FEATURES

Standard one-year warranty.

Ten-year non-prorated warranty on heat exchanger.

Ten-year Extended Protection Plan for the compressor.

Units are ‘‘Rated in accordance with ARI Standard No. 270 and 210/240.’’

Standard unit as factory assembled is design certified and listed by UL and UL, Canada.

Compressor Time Guard® device standard.

Low temperature cooling operation standard to 40 F (4 C).

Hermetic compressor with internal linebreak and overload protection, self lubricating. Scroll compressors are standard.

Foil-faced cleanable insulation.

Sloped non-corrosive condensate drain pan.

Up to 12.0 SEER cooling efficiency.

Single-point gas connection.

Alternate electrical connections on opposite sides of unit.

Multi-speed, direct drive indoor fan motor.

Indoor and outdoor coils constructed of aluminum fins mechanically bonded to seamless copper tubes.

Disconnect in accordance with NEC, must be field-supplied and installed.

Weatherized cabinets. Heavy duty phosphated zinc-coated prepainted steel. Capable of withstanding 500-hour salt spray.

24-volt control circuit.

Heating controls include a direct spark ignition with flame rectification.

Induced-draft with hall effect sensor (to prove proper inducer draft motor operation).

Alumaguard™ coated ‘‘Super-S’’ four-pass heat exchanger.

Base rail standard on all three-phase units.

Integrated gas control board provides anti-cycle protection for gas heat operation.

State of the art defrost control board which may be easily configured for defrost cycles of 30, 50 or 90 minutes.

Standard loss-of-charge switch.

PERFORMANCE DATA

Operating Weight _____ lb (unit); _____ lb (curb)

COOLING

Net Total Capacity _____ Btuh

Net Sensible Capacity _____ Btuh

Compressor Power Input _____ kW @ _____ °F Outdoor-Air Temperature

Indoor Entering Air db _____ °F wb _____ °F

SEER/EER _____

CFM _____ Ext. Static Pressure _____ in. wg

Indoor Fan Motor _____ Hp _____ Rpm _____ Bhp

HEATING

Input _____ Btuh

Output _____ Btuh

AFUE _____ %

Power Input to Unit _____ kW

Integrated Capacity _____ Btuh

Indoor Operating Temp _____ °F db

Outdoor-Air Temp _____ °F (Winter Design)

COP/HSPF _____ Hi _____ Lo

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz.

Minimum Circuit Amps _____ Maximum Overcurrent Protection _____

ACCESSORIES AND OPTIONS

FACTORY-INSTALLED OPTIONS

- ☐ Commercial Grade Base Rail
- ☐ Dedicated Downshot/Base Rail

FIELD-INSTALLED ACCESSORIES

- ☐ 30% Open Manual Fresh Air Damper
- ☐ Roof Curb:
  - ☐ 8″ Height
  - ☐ 11″ Height
  - ☐ 14″ Height
- ☐ One-in. Filter Rack

FIELD-INSTALLED ACCESORIES (cont)

- ☐ Programmable Electronic Thermostat
- ☐ Thermostat and Subbase
- ☐ 0° Low Ambient
- ☐ L.P. Conversion Kit
- ☐ Controls Upgrade Kit (High- and Low-Pressure Switch)
- ☐ External Condensate Trap
- ☐ Natural Gas High-Altitude Kit (2000-5000 ft Above Sea Level)

CERTIFIED DIMENSION PRINT

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REQ'D CLEARANCES FOR SERVICING — in. (mm)

Duct Panel 0
Unit Top 36 (914.4)
Side Opposite Ducts 36 (914.4)
Compressor Access 36 (914.4)
(Except for NEC requirements)

REQ'D CLEARANCES TO COMBUSTIBLE MAT'L — in. (mm)

Maximum Extension of Overhangs 48 (1219.2)
Unit Top 14 (355.6)
Duct Side of Unit 2 (50.8)
Side Opposite Ducts 14 (355.6)
Bottom of Unit 0
Flue Panel 36 (914.4)

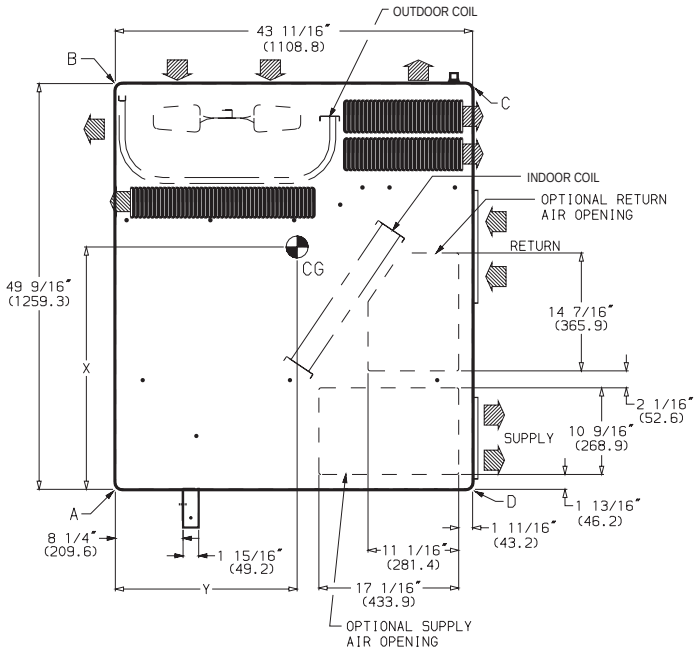
NEC (National Electrical Code) REQ'D CLEARANCES — in. (mm)

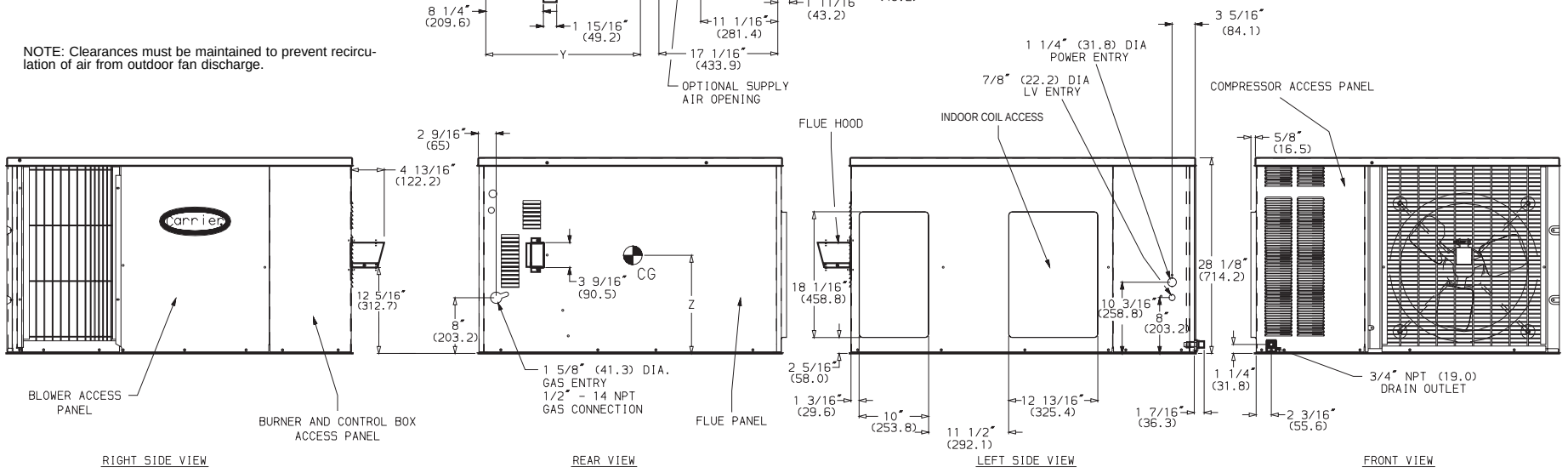
Between Units, Control Box Side 42 (1066.8)
Unit and Ungrounded Surfaces, Control Box Side 36 (914.4)
Unit and Block or Concrete Walls and Other Grounded Surfaces, Control Box Side 42 (1066.8)

NOTE: Clearances must be maintained to prevent recirculation of air from outdoor fan discharge.

UNIT 48HX	ELECTRICAL CHARACTERISTICS	UNIT WEIGHT		CORNER WEIGHT (lb/kg)			
		lb	kg	A	B	C	D
030060	208/230-1-60, 208/230-3-60	358	163	102/46	72/33	123/56	61/28

UNIT 48HX	CENTER OF GRAVITY (in./mm)		
	X	Y	Z
030060	26.90/684	22.62/575	12.65/321





DATE 05/17/95
SUPERSEDES 01/06/95
48HX030 PACKAGED HEAT PUMP WITH GAS HEAT
48SX500046
REV A

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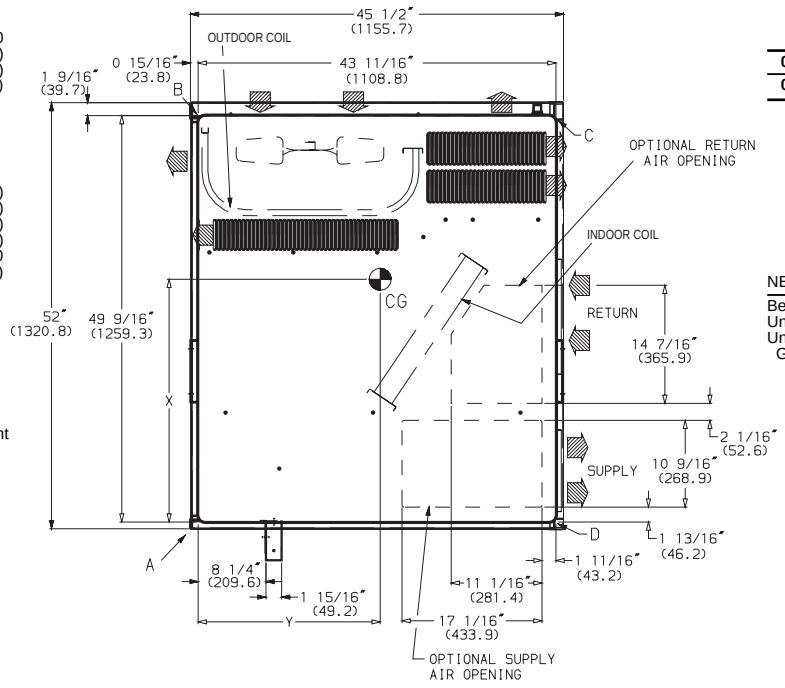
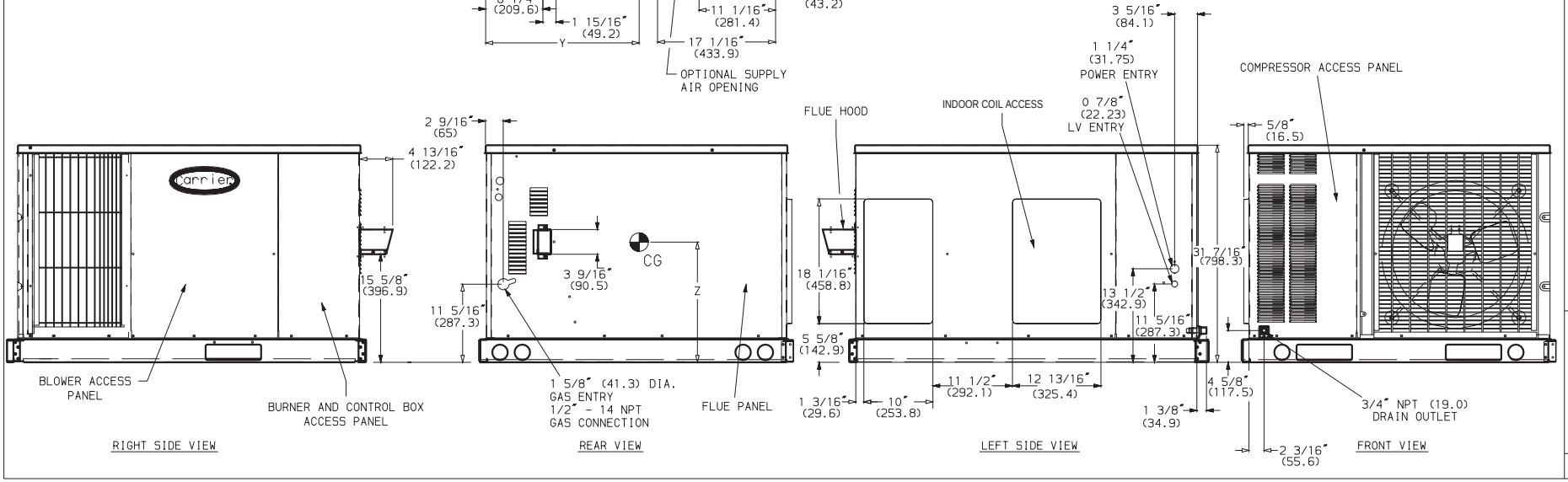


UNIT 48HX	ELECTRICAL CHARACTERISTICS	UNIT WEIGHT		CORNER WEIGHT (lb/kg)			
		lb	kg	A	B	C	D
030040	208/230-1-60, 208/230-3-60	370	169	105/48	75/34	126/57	64/29
030060	208/230-1-60, 208/230-3-60	382	174	108/49	78/35	129/59	67/30

UNIT 48HX	CENTER OF GRAVITY (in./mm)		
	X	Y	Z
030040	26.85/682	23.25/590	15.96/405
030060	26.75/680	23.25/590	15.96/405

NEC (National Electrical Code) REQ'D CLEARANCES — in. (mm)

Between Units, Control Box Side 42 (1066.8)
Unit and Ungrounded Surfaces, Control Box Side 36 (914.4)
Unit and Block or Concrete Walls and Other Grounded Surfaces, Control Box Side 42 (1066.8)



DATE 05/17/95
SUPERSEDES 01/06/95
PACKAGED HEAT PUMP WITH GAS HEAT
48HX030
48SX500054
REV A

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REQ'D CLEARANCES FOR SERVICING
— in. (mm)

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Unit Top 36 (914.4)
Side Opposite Ducts 36 (914.4)
Compressor Access 36 (914.4)
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MAT'L — in. (mm)

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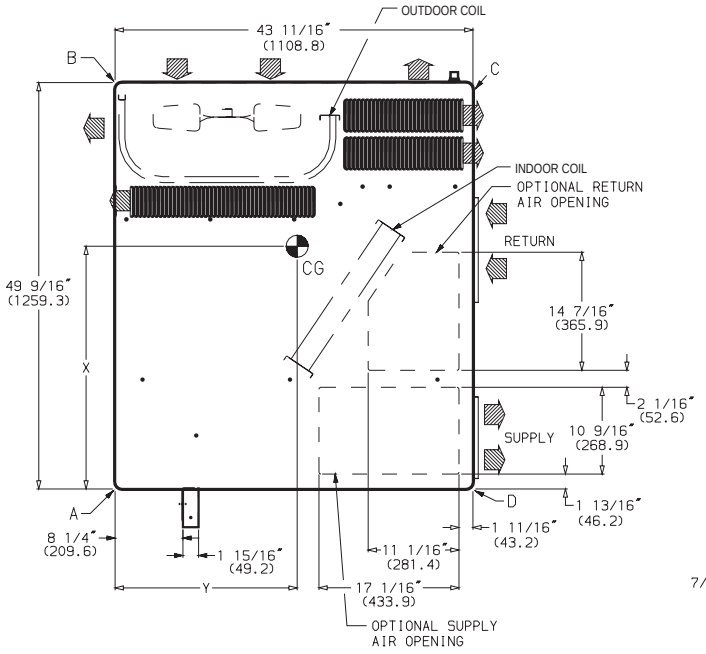
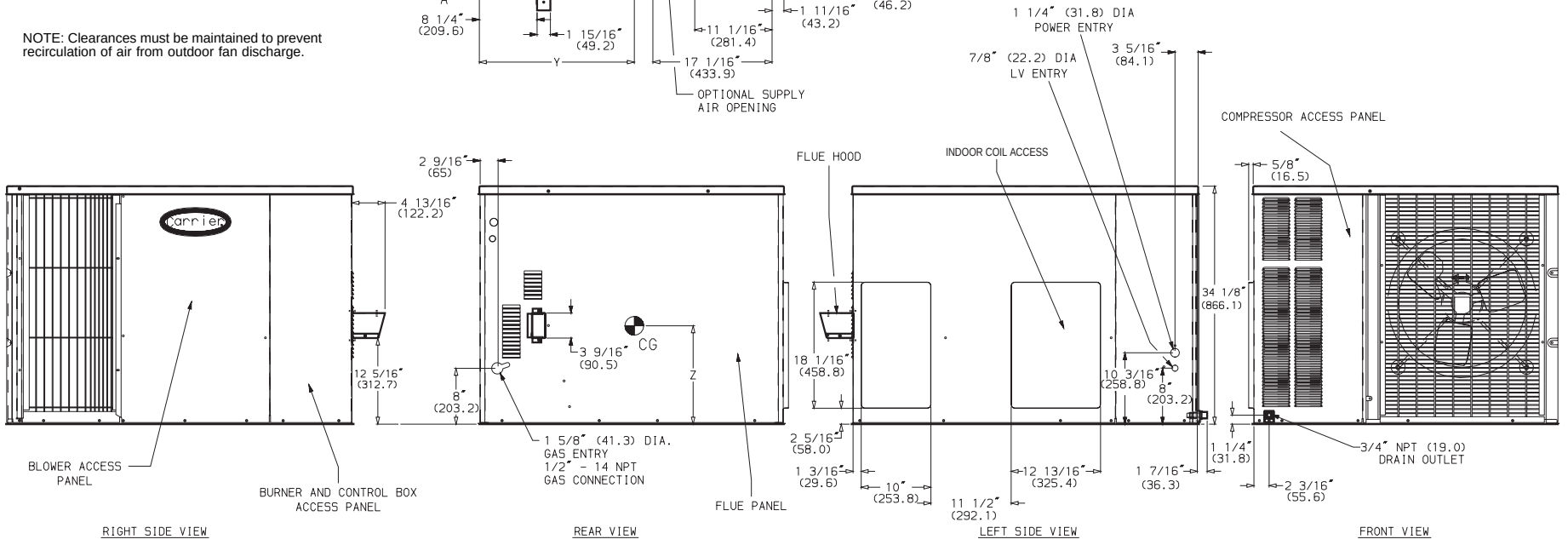


UNIT 48HX	ELECTRICAL CHARACTERISTICS	UNIT WEIGHT		CORNER WEIGHT (lb/kg)			
		lb	kg	A	B	C	D
036060/080	208/230-1-60, 208/230-3-60, 460-3-60	432	196	111/50	88/40	160/73	73/33
048080/100	208/230-1-60, 208/230-3-60	432	196	111/50	88/40	160/73	73/33
060080/100	208/230-1-60, 208/230-3-60	463	210	119/54	96/44	167/76	81/37

UNIT 48HX	CENTER OF GRAVITY (in./mm)		
	X	Y	Z
036060/080	28.38/720	22.75/604	15.35/390
048080/100	28.38/720	23.75/604	15.35/390
060080/100	28.06/713	23.60/599	15.35/390



DATE 05/17/95
SUPERSEDES 01/06/95
48HX036 - 48HX060 PACKAGED HEAT PUMP WITH GAS HEAT
48SX500049
REV. A

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REQ'D CLEARANCES FOR SERVICING

— in. (mm)

Duct Panel 0
Unit Top 36 (914.4)
Side Opposite Ducts 36 (914.4)
Compressor Access 36 (914.4)
(Except for NEC requirements)

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MAT'L — in. (mm)

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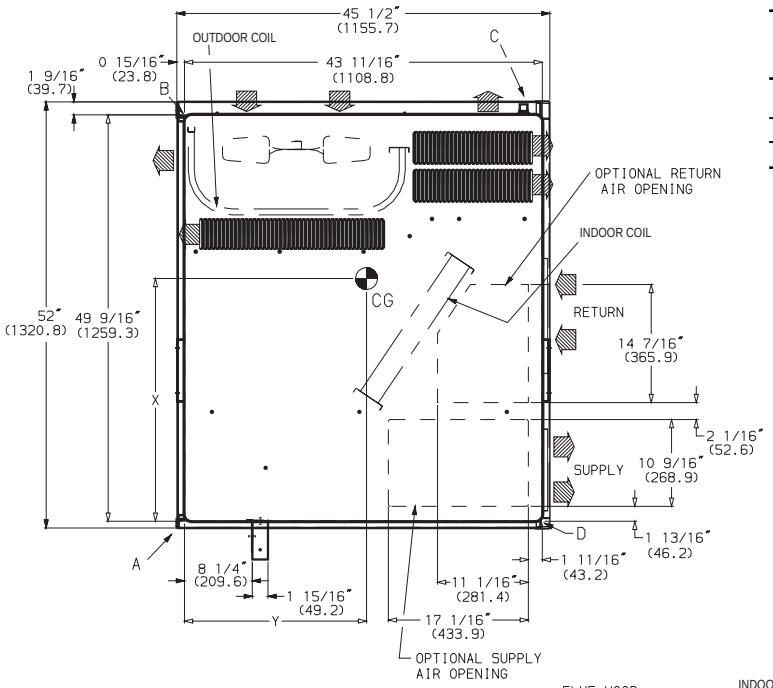
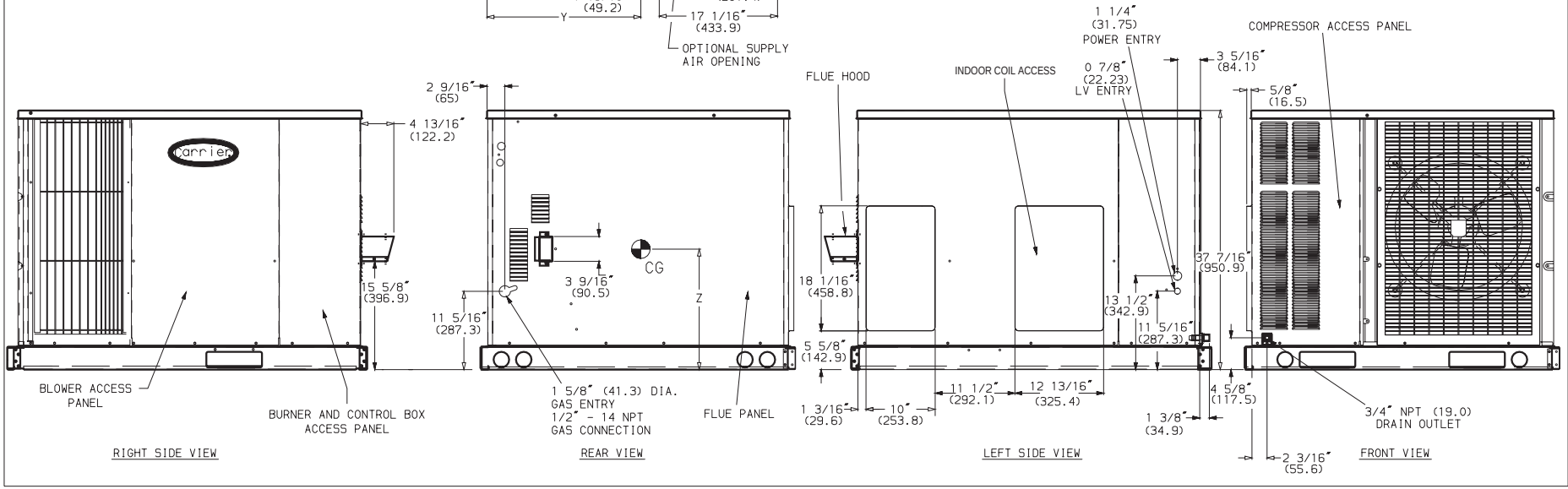


UNIT 48HX	ELECTRICAL CHARACTERISTICS	UNIT WEIGHT		CORNER WEIGHT (lb/kg)			
		lb	kg	A	B	C	D
036060/080	208/230-1-60, 208/230-3-60, 460-3-60	456	207	117/53	94/43	166/75	79/36
048080/100	208/230-1-60, 208/230-3-60	456	207	117/53	94/43	166/75	79/36
060080/100	208/230-1-60, 208/230-3-60	487	221	125/57	102/46	173/79	87/40

UNIT 48HX	CENTER OF GRAVITY (in./mm)		
	X	Y	Z
036060/080	28.16/716	24.50/622	18.66/474
048080/100	28.16/716	24.50/622	18.66/474
060080/100	27.90/709	24.30/618	18.66/474



DATE 02/14/97
SUPERSEDES 05/23/95
PACKAGED 48HX036-48HX060 HEAT PUMP WITH GAS HEAT
48SX500055
REV B

CERTIFIED ROOF CURB DIMENSION PRINT

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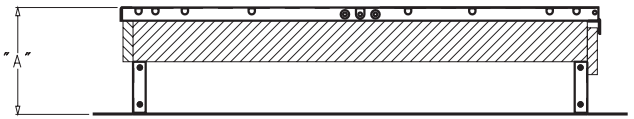
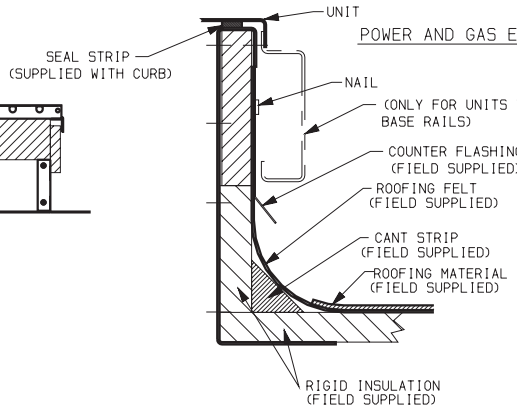
NOTES:
1. Roof curb must be set up for unit being installed.
2. Seal strip must be applied as required for unit being installed.
3. Dimensions in [ ] are in millimeters.
4. Roof curb is made of 16 gage steel.
5. Attach ductwork to curb (flanges of duct rest on curb).
6. Service clearance 4 ft on each side.
7. ⇨ Direction of airflow.
8. Insulated Panels: 1-in. thick fiberglass 1 lb density.

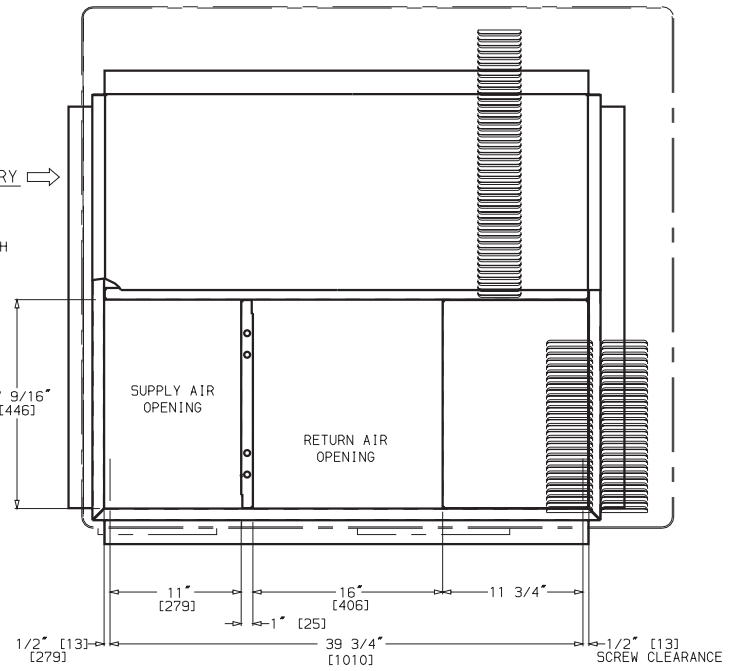
PART NUMBER	CURB	"A" (in./mm)
CPRFCURB001A00	FLAT	8 [203]
CPRFCURB002A00		11 [279]
CPRFCURB003A00		14 [356]

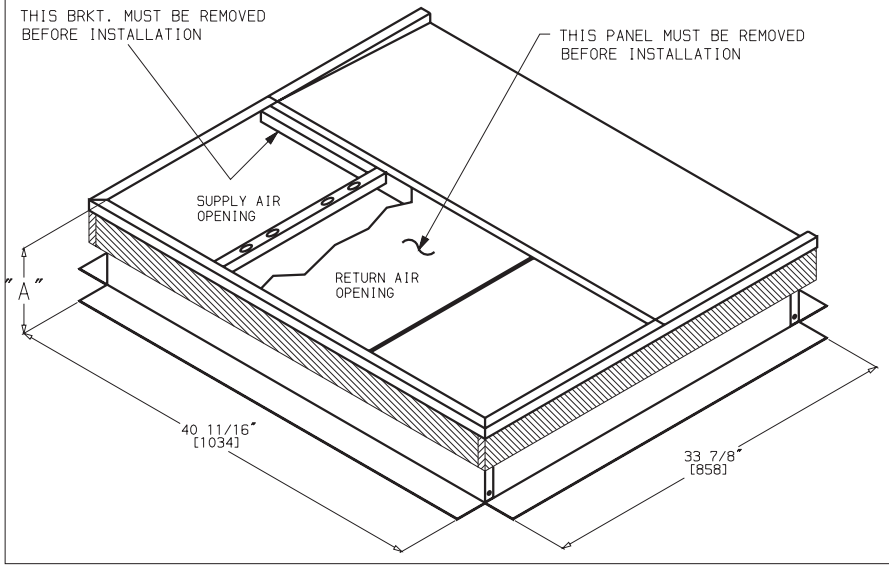


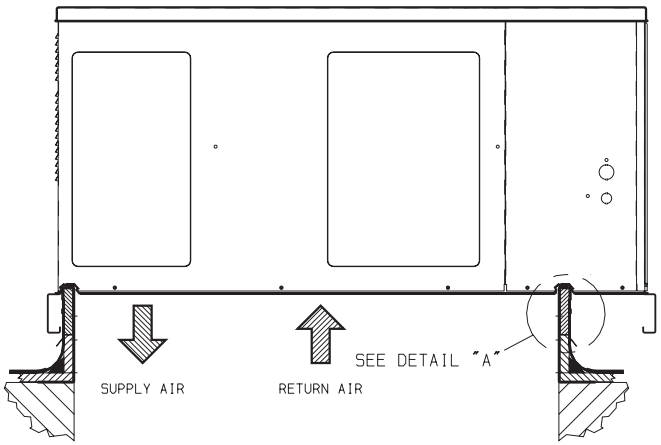
FLAT CURB



DETAIL "A"







DATE 04/18/94
SUPERSEDES 01/26/93
48HX 030-060 ROOFCURB
48SS500227
SHT 1
REV B